

# SEQUENCE LISTING

<110> Mignot, Emmanuel

<120> Hypocretin Receptor in  
Regulation of Sleep and Treatment of Sleep Disorders

<130> STAN-147

<150> 60/146,623

<151> 1999-07-30

<150> 60/171,857

<151> 1999-12-22

<160> 53

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<223> primer

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<400> 6  
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 Asp Tyr Asp Asp Glu Glu Phe Leu Arg Tyr Leu Trp Arg Glu Tyr Leu  
 35 40 45  
 His Pro Lys Glu Tyr Glu Trp Val Leu Ile Ala Gly Tyr Ile Ile Val  
 50 55 60  
 Phe Val Val Ala Leu Val Gly Asn Val Leu Val Cys Val Ala Val Trp  
 65 70 75 80  
 Lys Asn His His Met Arg Thr Val Thr Asn Tyr Phe Ile Val Asn Leu  
 85 90 95  
 Ser Leu Ala Asp Val Leu Val Thr Ile Thr Cys Leu Pro Ala Thr Leu  
 100 105 110  
 Val Val Asp Ile Thr Glu Thr Trp Phe Phe Gly Gln Ser Leu Cys Lys  
 115 120 125

Val	Ile	Pro	Tyr	Leu	Gln	Thr	Val	Ser	Val	Ser	Val	Ser	Val	Leu	Thr
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Leu	Ser	Cys	Ile	Ala	Leu	Asp	Arg	Trp	Tyr	Ala	Ile	Cys	His	Pro	Leu
145					150					155					160
Met	Phe	Lys	Ser	Thr	Ala	Lys	Arg	Ala	Arg	Asn	Ser	Ile	Val	Ile	Ile
				165					170					175	
Trp	Ile	Val	Ser	Cys	Ile	Ile	Met	Ile	Pro	Gln	Ala	Ile	Val	Met	Glu
			180					185					190		
Cys	Ser	Thr	Met	Leu	Pro	Gly	Leu	Ala	Asn	Lys	Thr	Thr	Leu	Phe	Thr
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Leu	Ala	Tyr	Leu	Gln	Ile	Phe	Arg	Lys	Leu	Trp	Cys	Arg	Gln	Ile	Pro
				245					250					255	
Gly	Thr	Ser	Ser	Val	Val	Gln	Arg	Lys	Trp	Lys	Pro	Leu	Gln	Pro	Ala
			260					265					270		
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305					310					315					320
Ser	Ile	Leu	Asn	Val	Leu	Lys	Arg	Val	Phe	Gly	Met	Phe	Thr	His	Thr
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Glu	Asp	Arg	Glu	Thr	Val	Tyr	Ala	Trp	Phe	Thr	Phe	Ser	His	Trp	Leu
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Val	Tyr	Ala	Asn	Ser	Ala	Ala	Asn	Pro	Ile	Ile	Tyr	Asn	Phe	Leu	Ser
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Gly	Lys	Phe	Arg	Glu	Glu	Phe	Lys	Ala	Ala	Phe	Ser	Cys	Cys	Cys	Leu
		370				375					380				
Gly	Val	His	His	Arg	Gln	Glu	Asp	Arg	Leu	Thr	Arg	Gly	Arg	Thr	Ser
385					390					395					400
Thr	Glu	Ser	Arg	Lys	Ser	Leu	Thr	Thr	Gln	Ile	Ser	Asn	Phe	Asp	Asn
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<210> 8

<212> PRT

<400> 8

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His Pro Lys Glu Tyr Glu Trp Val Leu Ile Ala Gly Tyr Ile Ile Val  
50 55 60



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Ser Ala Ser Glu Leu Asn Glu Thr Gln Glu Pro Phe Leu Asn Pro Thr  
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Asp Tyr Asp Asp Glu Glu Phe Leu Arg Tyr Leu Trp Arg Glu Tyr Leu  
35 40 45  
His Pro Lys Glu Tyr Glu Trp Val Leu Ile Ala Gly Tyr Ile Ile Val  
50 55 60  
Phe Val Val Ala Leu Ile Gly Asn Val Leu Val Cys Val Ala Val Trp  
65 70 75 80  
Lys Asn His His Met Arg Thr Val Thr Asn Tyr Phe Ile Val Asn Leu  
85 90 95  
Ser Leu Ala Asp Val Leu Val Thr Ile Thr Cys Leu Pro Ala Thr Leu  
100 105 110  
Val Val Asp Ile Thr Glu Thr Trp Phe Phe Gly Gln Ser Leu Cys Lys  
115 120 125  
Val Ile Pro Tyr Leu Gln Thr Val Ser Val Ser Val Ser Val Leu Thr  
130 135 140  
Leu Ser Cys Ile Ala Leu Asp Arg Trp Tyr Ala Ile Cys His Pro Leu  
145 150 155 160  
Met Phe Lys Ser Thr Ala Lys Arg Ala Arg Asn Ser Ile Val Val Ile  
165 170 175  
Trp Ile Val Ser Cys Ile Ile Met Ile Pro Gln Ala Ile Val Met Glu  
180 185 190  
Arg Ser Ser Met Leu Pro Gly Leu Ala Asn Lys Thr Thr Leu Phe Thr  
195 200 205  
Val Cys Asp Glu Arg Trp Gly Gly Glu Val Tyr Pro Lys Met Tyr His  
210 215 220  
Ile Cys Phe Phe Leu Val Thr Tyr Met Ala Pro Leu Cys Leu Met Val  
225 230 235 240  
Leu Ala Tyr Leu Gln Ile Phe Arg Lys Leu Trp Cys Arg Gln Ile Pro  
245 250 255  
Gly Thr Ser Ser Val Val Gln Arg Lys Trp Lys Gln Pro Gln Pro Val  
260 265 270  
Ser Gln Pro Arg Gly Ser Gly Gln Gln Ser Lys Ala Arg Ile Ser Ala  
275 280 285  
Val Ala Ala Glu Ile Lys Gln Ile Arg Ala Arg Arg Lys Thr Ala Arg  
290 295 300  
Met Leu Met Val Val Leu Leu Val Phe Ala Ile Cys Tyr Leu Pro Ile  
305 310 315 320  
Ser Ile Leu Asn Val Leu Lys Arg Val Phe Gly Met Phe Thr His Thr  
325 330 335  
Glu Asp Arg Glu Thr Val Tyr Ala Trp Phe Thr Phe Ser His Trp Leu  
340 345 350  
Val Tyr Ala Asn Ser Ala Ala Asn Pro Ile Ile Tyr Asn Phe Leu Ser  
355 360 365  
Gly Lys Phe Arg Glu Glu Phe Lys Ala Ala Phe Ser Cys Cys Leu Gly  
370 375 380  
Val His Arg Arg Gln Gly Asp Arg Leu Ala Arg Gly Arg Thr Ser Thr  
385 390 395 400  
Glu Ser Arg Lys Ser Leu Thr Thr Gln Ile Ser Asn Phe Asp Asn Val  
405 410 415  
Ser Lys Leu Ser Glu His Val Ala Leu Thr Ser Ile Ser Thr Leu Pro  
420 425 430

Ala Ala Asn Gly Ala Gly Pro Leu Gln Asn Trp Tyr Leu Gln Gln Gly  
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 <212> PRT  
 <213> Canis familiaris

<400> 10  
 Met Ser Gly Thr Lys Leu Glu Asp Ser Pro Pro Cys Arg Asn Trp Ser  
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 Ser Ala Pro Glu Leu Asn Glu Thr Gln Glu Pro Phe Leu Asn Pro Thr  
 20 25 30  
 Asp Tyr Asp Asp Glu Glu Phe Leu Arg Tyr Leu Trp Arg Glu Tyr Leu  
 35 40 45  
 His Pro Lys Glu Tyr Glu Trp Val Leu Ile Ala Gly Tyr Ile Ile Val  
 50 55 60  
 Phe Val Val Ala Leu Val Gly Asn Val Leu Val Cys Val Ala Val Trp  
 65 70 75 80  
 Lys Asn His His Met Arg Thr Val Thr Asn Tyr Phe Ile Val Asn Leu  
 85 90 95  
 Ser Leu Ala Asp Val Leu Val Thr Ile Thr Cys Leu Pro Ala Thr Leu  
 100 105 110  
 Val Val Asp Ile Thr Glu Thr Trp Phe Phe Gly Gln Ser Leu Cys Lys  
 115 120 125  
 Val Ile Pro Tyr Leu Gln Thr Val Ser Val Ser Val Ser Val Leu Thr  
 130 135 140  
 Leu Ser Cys Ile Ala Leu Asp Arg Trp Tyr Ala Ile Cys His Pro Leu  
 145 150 155 160  
 Met Phe Lys Ser Thr Ala Lys Arg Ala Arg Asn Ser Ile Val Ile Ile  
 165 170 175  
 Trp Ile Val Ser Cys Ile Ile Met Ile Pro Gln Ala Ile Val Met Glu  
 180 185 190  
 Cys Ser Thr Met Leu Pro Gly Leu Ala Asn Lys Thr Thr Leu Phe Thr  
 195 200 205  
 Val Cys Asp Glu Arg Trp Gly Gly Glu Ile Tyr Pro Lys Met Tyr His  
 210 215 220  
 Ile Cys Phe Phe Leu Val Thr Tyr Met Ala Pro Leu Cys Leu Met Val  
 225 230 235 240  
 Leu Ala Tyr Leu Gln Ile Phe Arg Lys Leu Trp Cys Arg Gln Ile Pro  
 245 250 255  
 Gly Thr Ser Ser Val Val Gln Arg Lys Trp Lys Gln Leu Gln Pro Ala  
 260 265 270  
 Ser Gln Pro Arg Gly Pro Gly Gln Gln Thr Lys Ser Arg Ile Ser Ala  
 275 280 285  
 Val Ala Ala Glu Ile Lys Gln Ile Arg Ala Arg Arg Lys Thr Ala Arg  
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 325 330

<210> 11  
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 <212> PRT  
 <213> Canis familiaris

<400> 11  
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 Asp Tyr Asp Asp Glu Glu Phe Leu Arg Tyr Leu Trp Arg Glu Tyr Leu  
 35 40 45  
 His Pro Lys Glu Tyr Glu Trp Val Leu Ile Ala Gly Tyr Ile Ile Val  
 50 55 60  
 Phe Val Val Ala Leu Val Gly Asn Val Leu Val Cys Val Ala Val Trp  
 65 70 75 80  
 Lys Asn His His Met Arg Thr Val Thr Asn Tyr Phe Ile Val Asn Leu  
 85 90 95  
 Ser Leu Ala Asp Val Leu Val Thr Ile Thr Cys Leu Pro Ala Thr Leu  
 100 105 110  
 Val Val Asp Ile Thr Glu Thr Trp Phe Phe Gly Gln Ser Leu Cys Lys  
 115 120 125  
 Val Ile Pro Tyr Leu Gln Thr Val Ser Val Ser Val Ser Val Leu Thr  
 130 135 140  
 Leu Ser Cys Ile Ala Leu Asp Arg Trp Tyr Ala Ile Cys His Pro Leu  
 145 150 155 160  
 Met Phe Lys Ser Thr Ala Lys Arg Ala Arg Asn Ser Ile Val Ile Ile  
 165 170 175  
 Trp Ile Val Ser Cys Ile Ile Met Ile Pro Gln Ala Ile Val Met Glu  
 180 185 190  
 Cys Ser Thr Met Leu Pro Gly Leu Ala Asn Lys Thr Thr Leu Phe Thr  
 195 200 205  
 Val Cys Asp Glu Arg Trp Gly Asp Pro Trp Asn Ile Ile Cys Ser Ser  
 210 215 220  
 Glu Lys Met Glu Ala Pro Ala Ala Cys Phe Thr Ala Ser Arg Ala Arg  
 225 230 235 240  
 Thr Ala Asp Gln Val Gln Asp Trp Cys Arg Gln Ile Pro Gly Thr Ser  
 245 250 255  
 Ser Val Val Gln Arg Lys Trp Lys Gln Leu Gln Pro Ala Ser Gln Pro  
 260 265 270  
 Arg Gly Pro Gly Gln Gln Thr Lys Ser Arg Ile Ser Ala Val Ala Ala  
 275 280 285  
 Glu Ile Lys Gln Ile Arg Ala Arg Arg Lys Thr Ala Arg Met Leu Met  
 290 295 300  
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 305 310 315 320  
 Asn Val Leu Lys Arg Lys Val  
 325

<210> 12  
 <211> 85  
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 <213> Homo sapien

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 tccaggtgaa atttacccca agatg 85

<210> 13  
 <211> 83  
 <212> DNA  
 <213> Homo sapiens

<400> 13  
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 caggtgaaat ttaccccaag atg 83

<210> 14  
 <211> 20  
 <212> DNA  
 <213> Homo sapiens

<400> 14  
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<210> 15  
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 <212> DNA  
 <213> Homo sapiens

<400> 15  
 attttctcag tggtagaattt 20

<210> 16  
 <211> 243  
 <212> DNA  
 <213> Homo sapiens

<400> 16  
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 accaccacag acatctcctt tcccggctac ccmaccctga gcgccagaca ccatgaacct 180  
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 aaa 243

<210> 17  
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 <212> DNA  
 <213> Homo sapiens

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 cggctgcaca gccctgccc gactgtgtgc gtcaaaagac ttgctcttgc cgcctctacg 180  
 agctgtgtga cggcgcgggc aatcacgcgg ccggcatcct cacgtgtggc aagcggaggt 240  
 ccgggcccc gggcctccag ggtcggtgctc agcgctcct gcaggccagc ggcaaccacg 300  
 ccgcgggcat cctgaccatg ggccgcgcgg caggcgcaga gccagcgccg cgccctgcc 360  
 tcgggcgccc ctgttccgcc ccggcgccg cctccgtcgc gcccgagga cagtccggga 420  
 tctgagtcgt tcttcgggcc ctgtcctggc ccaggcctct gccctctgcc caccagcgt 480



cagccccag aaaaaaggca ataaagacga gtctccattc gtgtgactgg tctctgttcc 540  
tgtgcggtcg cgtcctgccc atccgggggtg gca 573

<210> 18  
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<212> DNA  
<213> Homo sapiens

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agtgggctga gggctggccc aagctccctc ctctccctct gtagagccta ggatgcccct 180  
ctgctgcagc ggctcctgag ctcatggagc cctcagccac cccagggggc cagatggggg 240  
tcccccttg cagcagagag ccgtcccctg tgcctccaga ctatgaagat gagtttctcc 300  
gctatctgtg gcgygattat ctgtacccaa aacagtatga gtgggtcctc atcgagcct 360  
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cggcagtgtc gccggcttcc cctggggatt ga 452

<210> 19  
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<212> DNA  
<213> Homo sapiens

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ggctgaagtt ctgggtgactg ctatctgcct gccggccagc ctgctgggtg acatcactga 180  
gtcctggctg ttcgggccatg ccctctgcaa ggtcatcccc tatctacagg tgagctctgc 240  
ccaggcacc ctcaccactc ctt 263

<210> 20  
<211> 344  
<212> DNA  
<213> Homo sapiens

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accactatt gttcaagagc acagcccggc gggcccgtgg ctccatcctg ggcattctggg 180  
ctgtgtcgtg ggccatcatg gtgccccagg ctgcagtcac ggaatgcagc agtgtgctgc 240  
ctgagctagc caaccgcaca cggtcttctc cagtctgtga tgaacgctgg gcaggtaatg 300  
gtggaagcct caagcaggca tcccctcagg tgggcacttt ggga 344

<210> 21  
<211> 216  
<212> DNA  
<213> Homo sapiens

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ggccatggcc tatttccaga tattccgcaa gctctggggc cgccagggtga ggcccactct 180  
gggcaggggc taggccagtc actgtgtggg ctgggg 216

<210> 22

<211> 331  
 <212> DNA  
 <213> Homo sapiens

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 agcagggcct gagtggagag ccccagcccc gggccrcgc cttcctggct gaagtgaagc 180  
 agatgctgac acggaggaag acagccaaga tgctgatggt ggtgctgctg gtcttcgccc 240  
 tctgctacct gcccatcagc gtcctcaatg tccttaagag gtgagagcac ggggtatggt 300  
 tgggggtgggg agaagtttga ggttggggaa g 331

<210> 23  
 <211> 222  
 <212> DNA  
 <213> Homo sapiens

<400> 23  
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 ctggtgtacg ccaacagcgc tgccaacccc atcatctaca acttcctcag tggtagayag 180  
 gctgggggatg caaaatgact gaggggtggcc aacagtccac at 222

<210> 24  
 <211> 374  
 <212> DNA  
 <213> Homo sapiens

<400> 24  
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 gaaggccctt agtccccgct cctctgccag ccacaagtcc ttgtccttgc agagccgatg 180  
 ctccrtctcc aaaatctctg agcatgtggt gtcaccagc gtcaccacag tgctgccctg 240  
 agcgagggct gccctggagg ctccggctcg ggggatctgc ccctaccct catggaaaga 300  
 cagctggatg tggtgaaagg ctgtggcttc agtcctgggt ttctgcctgt gtgactctgg 360  
 ataagtcact tcct 374

<210> 25  
 <211> 636  
 <212> DNA  
 <213> Homo sapiens

<400> 25  
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 gtccctagtt cctcagctgc ctatcttccc ggtgcaacat cgctgtaaa gacagcaaag 180  
 ccaccgcaga agttgcccgg cagaagactc cggaggcatt ggctcagtaa cttttcacgt 240  
 cattttctgc tcgggagccc cttctagcct ctccgcgcag cctttcccac cgcaaatac 300  
 cagtgtcat ggggcaggcg gagaggagct tgcagcattg agcggaaccg gacttgagcc 360  
 cgtgatgtcc ggcaccaaata tggaggactc cyccmcttgt cgcaactggg catctgcttc 420  
 ggagctgaat gaaactcaag agcccttttt aaaccccacc gactatgacg acgaggaatt 480  
 cctgcggtac ctgtggaggg aatacctgca cccgaaagaa tatgagtggg tcctgatcgc 540  
 cgggtacatc atcgtgttcg tcgtggctct cattgggaac gtcttgggtg agtctcctcc 600  
 cgggcagccc tcctaggggc tatcaccccc tctccg 636

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 <211> 280  
 <212> DNA  
 <213> Homo sapiens

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 cagtgtggaa gaaccaccac atgaggacgg taaccaacta cttcatagtc aatctttctc 120  
 tggctgatgt gctcgtgacc atcacctgcc ttccagccac actggctcgtg gatatcactg 180  
 agacctgggt ttttggacag tccctttgca aagtgattcc ttatctacag gtaattgttt 240  
 ttaatgcttt tttgaagcta ctaaaaagaa tgttcagcya 280

<210> 27  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 27  
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 accctttgat gtttaagagc acagcaaagc gggcccgtaa cagcattgtc atcatctgga 180  
 ttgtctcctg cattataatg attcctcagg ccacgtcat ggagwgcagc accgtgttcc 240  
 caggcttagc caataaaacc accctcttta cgggtgtgtga tgagcgtgg ggtggtaagt 300  
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<210> 28  
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 <212> DNA  
 <213> Homo sapiens

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 ggtgttggtt tatctgcaaa tatttcgcaa actctggtgt cgacaggtat atagtttcaa 180  
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 caggacagcc aacgaagtcc cggatgagcg ctgtggcggc tgaaataaag cagatccgag 180  
 ccagaaggaa aacagcccgg atgttgatgr ttgtgctttt ggtatttgcr atttgctatc 240  
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<400> 30

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cttgatatg ccaatagtgc tgcgaatcca attatttata attttctcag tggtagagtt	180
tcaactgttc ttccataagc cacaattgta accaaggatg ag	222

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